

Name	Class
Teacher	Date

Unit 2 – Ratios and Proportional Reasoning
Post Summative Assessment

Section A - Post Test

6.RP.1

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In a sports equipment locker, there are 56 baseballs and 8 baseball mitts. How is the ratio of baseballs to baseball mitts expressed in simplest form?

- A 56:8
- B 8:56
- C 7:1
- D 1:7

Ray took a survey about how people in his class got to school. 24 students walked and 8 students took the yellow bus. Which statement correctly explains the ratio of walking students to bus students and is expressed in simplest form?

- A For every 24 students that walk, there are 8 students that take the bus.
- B For every 8 students that take the bus, there are 24 students that walk.
- C For every 3 students that walk, there is 1 student that takes the bus.
- D For every 1 student that takes the bus, there are 3 students that walk.

Kevin is making cookies for his wife. He needs to use 6 cups of flour and 3 cups of sugar for the recipe. Which statement correctly explains the ratio of cups of flour to cups of sugar in simplest form?

- A For every 2 cups of flour, there is 1 cup of sugar.
- B For every 3 cups of sugar, there are 6 cups of flour.
- C For every 1 cup of sugar, there are 3 cups of flour.
- D For every 6 cups of flour, there are 3 cups of sugar.

6.RP.2

Kathryn paid \$72 for 9 hamburgers. How much did she spend for 1 hamburger?

- A \$648
- B \$63
- C \$81
- D \$8

Jack can ride his bike 42 miles in 6 hours. How many miles does he ride in 1 hour?

- A 48 miles
- B 7 miles
- C 36 miles
- D 15 miles

I'm having a party. The rate of tacos to people is 63 to 21. What would that be expressed as a unit rate of tacos to people?

- A 63:21
- B 21:63
- C 3:1
- D 1:3

6.RP.3b

If it took 8 hours to mow 5 lawns, then at that rate, how many lawns could be mowed in 32 hours?

- A 27
- B 37
- C 40
- D 20

Jess can drive 432 km in 6 hours. At this rate, how far does she travel in one hour?

- A 60 km
- B 426 km
- C 72 km
- D 66 km

Maria bought 18 cans of soda for \$15.30. How much did 1 can cost?

- A \$ 0.55
- B \$ 0.85
- C \$ 0.65
- D \$ 0.70

6.RP.3a

There are 3 players per team. Use the table below to answer each of the following questions.

Players	3	6	A	15
Team	1	2	3	B

How many players will be in box “A” in the table above?

- A 18
- B 7
- C 9
- D 10

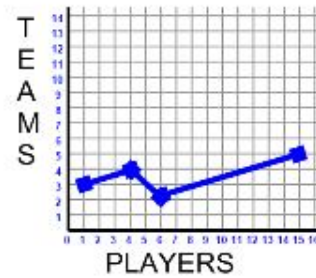
How many teams should there be for box “B”?

- A 5
- B 6
- C 18
- D 45

Which figure shows the data plotted correctly?



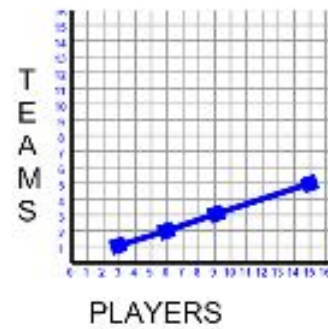
A



B



C



D

6.RP.3c
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What percent is 24 out of 50?

- A 26%
- B 24%
- C 48%
- D 74%

What is 30% of 60?

- A 18
- B 90
- C 30
- D 20

40% of the students in Ms. Byrne's class like ice cream. That is 6 students.
How many students are in the class all together?

- A 24
- B 240
- C 15
- D 6.67

6.RP.3d
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There are 12 inches in 1 foot. How many inches are in 5 feet?

- A 17
- B 6
- C 7
- D 60

There are 4 quarts in a gallon. How many quarts are in 18 gallons?

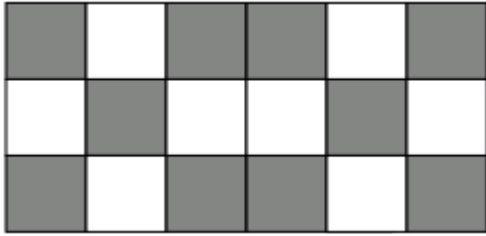
- A 14
- B 72
- C 12
- D 4

There are 2 cups in a pint. There are 2 pints in a quart. How many cups are in 8 quarts?

- A 32
- B 4
- C 6
- D 12

Section B: Summative Assessment

1. The new floor in the school cafeteria is going to be constructed of square tiles that are either gray or white and in the pattern that appears below:



Part A: 6.RP.1

What is the ratio of gray tiles to white tiles?

Answer: _____

Part B: 6.RP.1

What is the ratio of white tiles to the total number of tiles in the pattern?

Answer: _____

Part C: 6.RP.2

If the total cost of the white tiles is \$12, what is the unit cost per white tile?

Answer: \$ _____

2. **6.RP.2 and 6.RP.3**

A grocery store sign indicates that bananas are 6 for \$1.50, and a sign by the oranges indicates that they are 5 for \$3.00. Find the total cost of buying 2 bananas and 2 oranges.

Explain the steps you took to answer this question.

3. **6.RP.3d**

Jeremy has two 7-foot-long boards. He needs to cut pieces that are 15 inches long from the boards. What is the greatest number of 15-inch pieces he can cut from the two boards?

Justify your answer.

$12\text{ in} = 1\text{ foot}$

4. **6.RP.3c**

A clothing store offers a 30% discount on all items in the store.

Part A: If the original price of a sweater is \$40, how much will it cost after the discount?
Show your work.

Answer: _____

Part B: A shopper bought three of the same shirt and paid \$63 after the 30% discount. What was the original price of one of the shirts?
Show your work.

Answer: _____

Part C: Every store employee gets an additional 10% off the already discounted price. If an employee buys an item with an original price of \$40, how much will the employee pay?
Show your work.

Answer: _____

5. **6.RP.3a**

A box of wheat crackers contains 6 servings and has a total of 420 calories.

Part A: Complete the chart based on the information given.

Show your work.

servings	1	2	3	4	5	6
calories						420

Part B: Henry ate 30% of the box of wheat crackers. How many calories did he consume?

Explain the steps you took to answer this question.
